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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Anand Iyer

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EXAMINER

CHEA, PHILIP J

ART UNIT

PAPER NUMBER

2153

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/658,912	<b>Applicant(s)</b> IYER ET AL.	
	<b>Examiner</b> PHILIP J. CHEA	<b>Art Unit</b> 2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This Office Action is in response to an Amendment filed March 26, 2008. Claims 1-43 are currently pending. Any rejection not set forth below has been overcome by the current Amendment.

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 26, 2008 has been entered.

#### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 24-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The specification alludes to the means being performed by software (see Specification paragraphs 17-19). Given that there is no indication in the claims that the means only refers to hardware, one of ordinary skill in the art might consider the means software per se. Since software does not fall under one of the statutory categories, it is rejected as being non-statutory subject matter.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4,6-11,13-17,19-27,29-37,39-43, are rejected under 35 U.S.C. 103(a) as being unpatentable over Nesbitt, and further in view of Yip et al. (US 2003/0204578), herein referred to as Yip.

As per claims 1,11,14,24,34, Nesbitt discloses a method of processing a network device operating system operation, the method comprising the computer-implemented steps of:

receiving, from each of several network device operating system components, callback registration information that indicates the network device operating system operations supported by the network device operating system component and that establishes a callback for providing a network device operating system operation and associated data to the network device operating system component (see column 2, line 59 - column 3, line 3, *describing how an attribute broker receives a callback registration from a system element that indicates a desired attribute the system element wants to receive (i.e. a device operating component supported by the device)*);

selecting one of the several network device operating system components that can process the identified network device operating system operation, where the callback registration information received from the selected one of several network device operating system components indicates that the identified network device operating system operation is supported by the selected one of several network device operating system components (see column 3, lines 20-32 and column 3, line 67 – column 4, line 6, *describing supported operating system operations in the form of dynamic configuration to configure the element with the callback attribute and selecting one of the several network device operating system components that can process the callback configuration*);

preparing the associated data for use by the selected one of several network device operating system components (see column 3, line 67 - column 4, line 6, *showing how the attribute broker prepares the associated data with the registered network device*); and

providing the identified network device operating system operation and the prepared data in the callback to the selected one of several network device operating system components that was established by the callback registration information received from the selected one of several network device operating system components (see column 3, lines 50-59 and column 4, lines 3-6, *describing how*

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*the operation and data is provided to the network device in a callback for the network devices that registered with the callback function).*

Although the system disclosed by Nesbitt shows substantial features of the claimed invention (discussed above), it fails to disclose receiving the operating system operation and associated data within an Extensible Markup Language (XML) document; and parsing the XML document to identify the network device operating system operation.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Nesbitt, as evidenced by Yip.

In an analogous art, Yip discloses how a configuration manager can save a version of the configuration of a network device by storing the configuration data in an XML document (see Abstract). Yip further discloses receiving the operating system operation and associated data within an XML document, and parsing the XML document to identify the network device operating system operation (see paragraphs 27, 29, and 39, *describing how the configuration manager receives the configuration parameters in an XML document that includes a sequence of tags and values that identify and describe the format and values of the common internal data structures in memory of the router and parsing the XML formatted file that represents the last saved configuration to obtain the XML values needed to restore the configuration data*).

Given the teaching of Yip, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Nesbitt by employing an XML document to store the network operating system operations, such as disclosed by Yip, in order to provide a standard language that is easier for network administrators to read, understand, and edit as needed (see Yip, paragraph 33).

As per claims 2, 15, 25, 35, Yip further discloses receiving responsive data from the selected one of several network device operating system components (see paragraph 27);

creating a responsive XML document that contains the responsive data in XML format (see paragraph 29); and

sending the responsive XML document to a network management application (see paragraph 30).

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As per claims 3,16,26,36, Nesbitt-Yip further discloses that the XML document is received within a transport protocol message that conforms to one of several transport protocols, and further comprising the step of extracting the XML document from the transport protocol message (see Yip paragraph 30, *where it is obvious that the XML documents would be transported between the attribute broker and system element taught by Nesbitt, in order to configure the system element of Nesbitt*).

As per claims 4,17,27,37, Nesbitt further discloses at the selected one of the several network device operating system components, processing the identified network device operating system operating in preparation for invoking a function that can perform one or more tasks associated with the operation; and

invoking the function defined by the network device operating system component that can perform the one or more tasks associated with the operation (see column 3, line 64 – column 4, line 6).

As per claims 6-9,19-22,29-32,39-42, Nesbitt-Yip further disclose receiving, the XML document, a query from a network management application about the several network device operation system components that are supported (see column 3, lines 64-67, *showing how the attribute broker queries to see which system elements are in need of a configuration*); and providing a response to the network management application that identifies one or more of the several network device operation system components that are supported (see column 3, line 67 – column 4, line 5, *teaching that if any system element are registered for the configuration the attribute broker will call the callback function and the system element will be configured*). *In considering the XML document, Yip has shown that it is obvious to keep configuration parameters in an XML document. Therefore, the configuration that is performed on the system element by the attribute broker as taught by Nesbitt could be done with XML files.*

As per claims 10,23,33,43, Nesbitt-Yip further disclose receiving in the XML document, an invocation by a network management application of one or more several methods that are implemented by one or more objects of the several components; and invoking the one or more methods through a callback to one or more of the components (see column 3, line 67 – column 4, line 5). *In considering the XML document, Yip has shown that it is obvious to keep*

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*configuration parameters in an XML document. Therefore, the configuration that is performed on the system element by the attribute broker as taught by Nesbitt could be done with XML files.*

As per claim 12, Nesbitt further disclose component XML logic that implements one or more of the callbacks to which the identified network device operating system operation and the prepared data are provided by the programmatic agent infrastructure logic (see Nesbitt, column 3, line 64 - column 4, line 6);

component API logic that provides an application programming interface for one or more functions of the network device operating system component (see column 4, lines 1-6).

5. Claims 5,12,18,28,38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nesbitt-Yip as applied to claims 4,11,17,27,37 above, and further in view of Shah et al. (US 6,041,325), herein referred to as Shah.

As per claims 5,12,18,28,38, Yip further discloses that the XML document includes data associated with the network device operating system operation (see paragraph 39), and wherein the step for processing the identified network device operating system operation in preparation for invoking the function comprises:

mapping the data to one or more data structures that are associated with the function (see paragraph 39).

However, Nesbitt-Yip fail to disclose validating the data associated with the network device operating system operation.

The general concept of validating data associated with the network device operating system operation is well known in the art as illustrated by Shah. Shah teaches a method including the limitations for validating data associated with the network device OS operation (see spec, sec. 15, lines 4-10, which implies this limitation because the invention has logic embedded to validate data needed for functional operations carried out within the network of the invention).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nesbitt-Yip to include the steps of validating data associated with the network device operating system

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operation in order to improve upon the maintenance of services in a network, as implied in sec. 2, lines 23-67 of Shah.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILIP J. CHEA whose telephone number is (571)272-3951. The examiner can normally be reached on M-F 6:30-4:00 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Philip J Chea  
Examiner  
Art Unit 2153

PJC 5/28/08

/THUHA T. NGUYEN/  
Primary Examiner, Art Unit 2153